

Remarks

Claims 1 to 5 and 7 to 20 are pending.

Claims 1 and 19 have been amended. Support for the amendment can be found at least in claim 6 and at paragraph [0035] as filed. Claim 6 has been cancelled.

The Examiner continues to reject claims 1 to 20 under 35 U.S.C. §103(a) as obvious having regard to US 5,869,178 to Kusy et al. (hereinafter “Kusy”) in view of US 5,904,803 to Hillerich III et al. (hereinafter “Hillerich”). The Applicants respectfully traverse this rejection. Specifically, the applicant reiterates that Kusy does not disclose a shrinkable die and that the cited references provide no motivation or suggestion to combine them to arrive at the invention claimed in the present application, as discussed in the previous Response filed on February 28, 2006.

Further, it is submitted that the combination of Kusy and Hillerich does not disclose all of the elements recited in claim 1 as currently amended. In this regard, in addition to arguments presented below, the arguments presented in the previous Response are reasserted.

The Examiner maintains the position that it would have been obvious to one of ordinary skill in the art to combine the teachings of Hillerich and Kusy. The Examiner merely speculates that such a combination would be “motivated by process expedience (i.e. mold removal)”, but has not provided any specific reference in the prior art or the cited references for providing a motivation or suggestion to make such a combination. In fact, the applicants assert that combining Hillerich and Kusy would not be expedient, as suggested by the Examiner. In response, the Examiner appears to assert that it is the applicant’s burden to experimentally or otherwise disprove the Examiner’s assertion.

In particular, as discussed in the earlier Response, the Kusy process would not be expedited but hindered by using a collapsible mold as disclosed in Hillerich, since the collapsed mold would have to be repeatedly removed after each curing. The Examiner states in the Final Office Action

that the applicant bears the burden to show the combination would not expedite the Kusy process. In response, the applicant notes that it is the Examiner who alleged that it is common knowledge that the collapsible mold disclosed in Hillerich would expedite the process of Kusy, without any explanation or reference to any documentary evidence of record as to why this is the case. As consistently held by the courts and provided in MPEP 2144.03, A.:

“It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known.”

and,

“As noted by the court in *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970), the notice of facts beyond the record which may be taken by the examiner must be “capable of such instant and unquestionable demonstration as to defy dispute” (citing *In re Knapp Monarch Co.*, 296 F.2d 230, 132 USPQ 6 (CCPA 1961)). [Emphasis added.]

In the earlier Response, the applicants disputed, based on the evidence of record, the alleged fact that “combination of Kusy and Hillerich would expedite the Kusy process”. The applicant argued simply that based on the disclosure of the cited references, modifying Kusy according to Hillerich would not expedite, but hinder the Kusy process. The cited references thus in fact teach away from such a combination. In this regard, MPEP 2143.01, V. provides that:

“If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)” [emphasis added]

Further, MPEP 2144.03, B. provides that:

“If such notice [of facts of common knowledge] is taken, the basis for such reasoning must be set forth explicitly. The examiner must provide specific factual findings predicated on sound

technical and scientific reasoning to support his or her conclusion of common knowledge. See *Soli*, 317 F.2d at 946, 37 USPQ at 801; *Chevenard*, 139 F.2d at 713, 60 USPQ at 241. The applicant should be presented with the explicit basis on which the examiner regards the matter as subject to official notice and be allowed to challenge the assertion in the next reply after the Office action in which the common knowledge statement was made."

It is submitted that the Examiner has failed to provide any explicit and specific factual findings predicated on sound technical and scientific reasoning to support the conclusion that combination of Kusy with Hillerich would expedite the Kusy process. It is also respectfully submitted that the Examiner bears the burden to establish a *prima facie* case of obviousness and the Examiner has failed to do so.

In addition to the argument presented in the earlier Response, it is further noted that current claim 1 recites, among others, that the tunnel of the shrinkable die has a pre-defined transversal cross-sectional shape, and the die is shrunk by heating the die to reduce the transversal cross-section of the tunnel along a longitudinal extent of the tunnel so as to compress the composite of fiber and resin to assume the pre-defined transversal cross-sectional shape, wherein the tunnel retains the pre-defined cross-sectional shape and shrinks uniformly in cross-sectional area as the die is shrunk. The cited references, either alone or in combination, do not disclose or suggest the use of a die that has a pre-defined transversal cross-sectional shape, which is retained when the die is shrunk. Thus, the cited references do not disclose all of the recited elements of claim 1. For similar reasons, the cited references do not disclose all of the recited elements in claims 2 to 20.

In view of the above, withdrawal of the rejection based on §103(a) is respectfully requested.

No new matter has been added by this amendment.

In view of the foregoing, reconsideration and allowance of this application is earnestly solicited.

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Respectfully submitted,

DINSMORE & SHOHL, LLP

By: /James E. Beyer/  
James E. Beyer  
Registration No. 26,868

One Dayton Centre  
One South Main Street, Suite 1300  
Dayton, Ohio  
45402

Tel: (937) 449-6438  
Fax: (937) 223-0724

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